

## PUBLIC MEETINGS

The public meetings consisted of brief presentations by DOE on the Draft Supplemental EIS, followed by a question and answer and comment period. In this section, each public meeting speaker's statement is placed in context and paraphrased because some statements are dependent on previous statements and interspersed with other discussion. The transcripts from the meetings can be reviewed at the DOE Public Reading Rooms: DOE Freedom of Information Reading Room, Forrestal Building, Room 1E-190, 1000 Independence Avenue, S.W., Washington, D.C., 20585, phone: 202-586-6020 and DOE Public Document Room, University of South Carolina, Aiken Campus, University Library, 2<sup>nd</sup> Floor, 171 University Parkway, Aiken, SC 29801, Phone: 803-648-6815.

Paraphrased comments from the meetings and DOE's responses are as follows:

M1-01: One commenter asked that DOE explain the differences in waste generation between the various alternatives, and how waste solvents used in the Solvent Extraction Alternative would be managed.

Response: Waste generation that DOE expects to result from operation of each of the alternatives is shown in Tables 4-18 and 4-19 of the Supplemental EIS. DOE would clean and reuse solvent that would be used in the solvent extraction alternative. Evaluations to date indicate solvent would function as intended for at least one year and perhaps as long as three years. Currently, incineration is considered the best available treatment technology for benzene and other organic liquid wastes. DOE expects that these wastes would be disposed of by incineration. DOE has not yet determined whether the Consolidated Incineration Facility, a portable vendor-operated facility, or a suitable offsite facility would be used for incineration of these wastes. DOE analyzed the impacts of incineration and various alternatives to incineration in the *Final Supplemental Environmental Impact Statement, Defense Waste Processing Facility* (DOE/EIS-0082-S, November 1994). The results of this analysis show that the impacts from the various alternatives to incineration are bounded by the impacts of incineration. The actual treatment facility would be determined during design and construction of the salt processing facility.

M1-02: The commenter asked if there were waste management issues with alternatives other than Solvent Extraction.

Response: Management of benzene that would be generated from operation of the Small Tank Precipitation alternative is also an issue. See also response to M1-01.

M2-01: No public comments were made at meeting M2.

M3-01: A commenter asked how the benzene generated from the Small Tank Precipitation alternative would be managed.

Response: See response to comment M1-02.

M3-02: The commenter asked if selection of the Small Tank Precipitation alternative for implementation would affect DOE's decision on the future of the Consolidated Incineration Facility.

Response: Currently, incineration is considered the best available treatment technology for benzene and other organic liquid wastes. DOE expects that these wastes would be disposed of by incineration. DOE has not yet determined whether the Consolidated Incineration Facility, a portable vendor-operated facility, or a suitable offsite facility would be used for incineration of these wastes. DOE

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M3-03 and M3-04: One commenter asked if the salt processing alternative selected would account for the possibility of a liquid waste stream from the Mixed Oxide Fuel Fabrication Facility, currently planned for the Savannah River Site. The commenter also asked if the waste stream from the Mixed Oxide Fuel Fabrication Facility would be similar in composition to the HLW to be processed in the proposed salt processing facility.

Response to comments M3-03 and M3-04: The salt processing alternative would be designed to separate the high-activity and low-activity fractions of any waste stream that has been or would be sent to the Savannah River Site HLW tanks for storage. DOE believes a liquid waste stream from the Mixed Oxide Fuel Facility would be similar enough to existing SRS HLW that it could be safely stored in the SRS HLW tanks and managed through the SRS HLW system, including the salt processing alternative. The annual volume of liquid waste from the Mixed Oxide Fuel Facility is expected to be small relative to the annual volumes of waste generated by DWPF and other Site activities. The impact of that waste stream will be considered in more detail in the U.S. Nuclear Regulatory Commission's EIS on the Mixed Oxide Fuel Facility (See Notice of Intent; 66 FR 1394; March 7, 2001).

M3-05 and M3-06: One commenter asked which of the salt processing alternatives would be the most cost effective, and also asked how much had been spent on the In-Tank Precipitation process.

Response to comments M3-05 and M3-06: Based on very preliminary estimates the Direct Disposal in Grout alternative would be the least expensive to construct and operate. DOE spent approximately \$500 million on the In-Tank Precipitation program.

M3-07: One commenter observed that DOE expected that the Direct Disposal in Grout would be the least costly alternative to implement, but that its implementation would necessitate reclassification of the Saltstone Disposal Facility.

Response: The saltstone vaults are designed to the requirements for disposal of Class C low-level waste. The commenter is correct in that DOE would be required to notify the South Carolina Department of Health and Environmental Control if DOE proposed to dispose of waste that exceeded the Class A standards.

M3-08: One commenter wanted to know the half-life of cesium.

Response: The half-life of cesium-137, the dominant radionuclide in SRS salt waste, is 30 years.

M3-09: One commenter asked what discussions had been held with the Environmental Protection Agency and the South Carolina Department of Health and Environmental Control regarding the acceptability of the Direct Disposal in Grout alternative.

Response: Preliminary discussions with regulators (Nuclear Regulatory Commission, SCDHEC, and EPA-Region IV) indicate general acceptance of the Direct Disposal in Grout concept, provided DOE could establish that the final waste form does not require management as HLW. However, if Direct

Disposal in Grout were selected as the preferred alternative, additional discussion with the regulating agencies would be necessary to address regulatory issues.

M3-10 and M3-11: One commenter asked if in the No Action alternative DOE assumed periodic replacement of high-level waste tanks and transfer of waste to new tanks. The commenter also asked if DOE had evaluated in the No Action alternative the failure of HLW tanks and release of HLW to the environment.

Response to comments M3-10 and M3-11: The No Action alternative does not assume that DOE would continue to replace HLW tanks indefinitely if no effective salt processing alternative is found. DOE did not quantitatively evaluate the impacts of the failure of HLW tanks and the release of the contents to the environment in the Draft Supplemental EIS. However, in response to this and other comments, DOE has evaluated the impacts of such a scenario in this Final Supplemental EIS.

M3-12, M3-13, and M3-14: One commenter asked about leaking HLW tanks: how many are leaking now, how many have leaked in the past, what is done with a leaking tank, and in what year did a HLW tank leak to the environment.

Response to Comments M3-12, M3-13, and M3-14: Fifty-one HLW tanks have been constructed at the Savannah River Site, the first in the early 1960s and the last about 1980. Ten of these tanks have had identified leak sites, and only one tank has leaked to the environment (Tank 8, in 1961) and the waste has been removed from that tank. In general, if a leak is identified DOE would lower the waste level in the tank so it was below the leak site. SCDHEC would be notified, as required by the Federal Facility Agreement, and DOE would formulate and implement a plan to stop the leak and clean up any environmental contamination. Because of the radiation environment in tanks, the technology does not exist to repair leak sites. Most of the leaks identified in Savannah River Site have been into the annulus between the primary tank and the secondary containment structure. Collection systems are in place for those tanks that do not have secondary containment.

M3-15: One commenter observed that there were public meetings on the In-Tank Precipitation Process in 1995, and asked what had been done in the interval about precipitation in the HLW tanks.

Response: DOE believes the commenter is referring to public meetings on DOE/EIS-0082-SD, Draft Supplemental Environmental Impact Statement, Defense Waste Processing Facility, which were held in Columbia, South Carolina on September 20, 1994. That Supplemental EIS addressed the proposed operation of the Defense Waste Processing Facility, including the In-Tank Precipitation process. Since that time, DOE has determined that the In-Tank precipitation process cannot meet production goals and safety requirements and is pursuing a technology to replace the In-Tank Precipitation process. Alternative technologies for replacement of the In-Tank Precipitation process are the subject of this Final Supplemental EIS.

M3-16 and M3-17: One commenter expressed the opinion that someone had a lot to answer for, because cleanup is seemingly stopping yet DOE is proceeding with the Mixed Oxide Fuel Fabrication Facility and bringing plutonium from many locations to the Savannah River Site. The commenter asked if DOE had ever planned to remove HLW waste from the HLW tanks.

Response to comments M3-16 and M3-17: The HLW tanks at the Savannah River Site were designed as temporary storage facilities and were never intended for permanent disposal of HLW. DOE and its predecessors began planning for disposal of this HLW more than two decades ago. Cleanup, including nuclear material stabilization and HLW vitrification, is a continuing SRS mission and is not stopping.

M3-18, M3-19, and M3-21: Two commenters expressed opposition to the Mixed Oxide Fuel Fabrication Facility and support for the No Action Alternative in the Salt Processing Alternatives Supplemental EIS. The commenters support the No Action Alternative while the impacts of the potential liquid waste stream from the Mixed Oxide Fuel Fabrication Facility on the Savannah River Site HLW management system is determined.

Response to comments M3-18, M3-19, and M3-21: The purpose and need for DOE action in this SEIS is to achieve the ability to safely process 31.2 million gallons of salt component containing approximately 160 million curies. This need is urgent and predates the proposal for a mixed oxide (MOX) fuel fabrication facility. The notice of intent by the U.S. Nuclear Regulatory Commission to prepare an EIS for a MOX facility was published recently (66 FR 1394; March 7, 2001). At this stage of early planning, DOE does not know if the SRS Tank Farms could or would receive MOX waste. Therefore, DOE must proceed with the salt processing action based on its primary and urgent mission to vitrify the existing waste in the SRS Tank Farms.

M3-20: One commenter asked if there would be a public comment period after the preferred alternative is identified in the Final Salt Disposition Alternatives Supplemental EIS.

Response: Neither the Council on Environmental Quality Regulations implementing the National Environmental Policy Act, nor DOE's regulations implementing NEPA, require a public comment period after a Final EIS (or Final Supplemental EIS) is issued, and DOE does not plan to have such a comment period. DOE may not, however, issue its Record of Decision until 30 days after the Notice of Availability for the Final Supplemental EIS is published in the Federal Register, and members of the public are free to comment during the 30-day period. Generally, DOE addresses any comments received on a Final EIS in its Record of Decision for the EIS.

M4-1 and M4-2: One commenter observed that risk was not a clear discriminator among alternatives and asked what would be the determining factor in the selection process and if DOE was leaning toward one of the alternatives.

Response: DOE has established nine criteria for use in evaluating the salt processing alternatives. These are identified in Section 2.6. There are technical risks associated with each of the alternatives. The research and development process has focused on reducing those risks. There is no one factor that would be the determining factor. At the time of this public meeting, DOE did not have a preferred alternative, but identifies its preferred alternative in this final SEIS.

M4-3, M4-10 and M4-11: One commenter asked if DOE was going to do a pilot demonstration of one or more than one salt processing technology. The commenter also asked about the anticipated operating time of the pilot facility and if a new contractor would be responsible for the pilot facility or only for the construction and operation of the full scale salt processing facility.

Response to comments M4-3, M4-10, and M4-11: As described in Section 4.1.14, DOE has not decided if one or more than one technology would be tested at the pilot scale. DOE plans to operate the pilot plant for a period of 6 to 18 months. DOE has not determined if a new contractor would operate the pilot plant and construct and operate the full-scale facility.

M4-4: One commenter observed that comparing 10 CFR 61.55 Class C waste disposal regulations to the Direct Disposal in Grout alternative may not be appropriate.

Response: DOE has investigated this issue and can find no limit on the quantity of Class C waste that could be placed in a disposal unit (e.g., a disposal cell). The Direct Disposal in Grout alternative

would comply with the waste classification and stability requirements in 10 CFR 61.55 and 10 CFR 61.56. DOE Manual 435.1-1 establishes a process for making waste incidental to reprocessing determinations. This process evaluates candidate waste streams to determine if they can be managed as low-level waste or transuranic waste. Wastes can be managed as low-level waste if they meet specific criteria including being managed pursuant to DOE's authority under the Atomic Energy Act of 1954 and, provided the waste will be incorporated in a solid physical form at a concentration that does not exceed the concentration limits for Class C low-level waste in 10 CFR 61.55. The performance assessment would consider the facility design and location and waste characteristics.

M4-5: One commenter observed that the Ion Exchange alternative seemed to be the simplest and most straightforward alternative and asked if simplicity or relative simplicity was a consideration in the process for selecting a salt processing alternative.

Response: The relative simplicity of the technology is a factor in the technology selection process.

M4-6 and M4-7: One commenter asked where all of the uncertainties with the alternatives were discussed and if bidders on the salt processing facility contract would have access to those uncertainties.

Response to comments M4-6 and M4-7: Uncertainty regarding implementation of the alternatives is a factor in the technology selection process. DOE's evaluations leading to the selection of the preferred alternative will be made available to the public.

M4-8: One commenter observed that the Solvent Extraction alternative was once considered too technically immature to be pursued, and asked what was the maturing process that had made it a reasonable alternative.

Response: The principal developers of the solvent extraction technology had received other funding for their research and development efforts and made considerable progress in developing a stable solvent that performs its functions efficiently for use in the process. Therefore, because other aspects of the technology appear to be mature enough for implementation, DOE has evaluated solvent extraction as a reasonable salt processing alternative.

M4-9: One commenter asked if there were contingencies to free up HLW tank space if the salt processing technology was not operational by 2010.

Response: DOE continues to evaluate contingencies for gaining tank space. These include actions to increase the operational availability of the HLW evaporators, alternatives for management of DWPF recycle waste, and other management efficiencies. Some of the potential actions are described in more detail in Section 2.3 of this Final Supplemental EIS.

M4-10: One commenter asked if DOE intended to try to use existing facilities within SRS for salt processing activities.

Response: DOE does intend to use existing facilities to the extent possible, but each of the action alternatives would require a new facility, which DOE would build on a previously disturbed site in the DWPF area.

M4-11: One commenter asked if the pilot plant would be built and operated by DOE's current contractor or if it would be part of the new salt processing contract.

Response: Contracting questions are outside the scope of the NEPA process.